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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,831	09/05/2003	Erwin Baiker	HOE-774	8428
20028	7590	03/08/2006	EXAMINER	
Lipsitz & McAllister, LLC 755 MAIN STREET MONROE, CT 06468			KOEHLER, CHRISTOPHER M	
			ART UNIT	PAPER NUMBER
			3726	

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/656,831	BAIKER, ERWIN	
	<b>Examiner</b>	<b>Art Unit</b>	
	Christopher M. Koehler	3726	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 December 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 1-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) 25 and 26 is/are allowed.
- 6) ☒ Claim(s) 16-24 and 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 24 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically it is unclear how the channel comprises a pipe.

### ***Claim Rejections - 35 USC § 103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 16-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mead et al (US Patent No. 2,770,924) in view of Russell (US Patent No. 4,773,113).
3. Regarding claim 16, Mead teaches a shot-peening apparatus for shot-peening, with a stream of shot-peening particles, a surface comprising, a flexible plastic tube (B) capable of being advanced through the bent portion of a channel for introducing a stream of shot peening particles into the bent portion of the channel, an outlet end of the tube, and an outlet device attached to the outlet end (A) for directing the particles having a particle deflection portion (60, figure 3). Mead does not teach an elongated helically wound wire enclosing the tube for reducing friction between the tube and the inner wall of when the tube is

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advanced through the channel. Russell teaches a device comprising a flexible plastic tube advance-able through the bent portion of a channel or pipe for delivery of a substance into the channel. The device of Russell has a elongated helically wound wire (114) enclosing the plastic tube (110, figure 6) the metal wire inherently has a lower coefficient of friction than the elastomeric tube and therefore would reduce the friction. It would have been to one of ordinary skill in the art at the time of invention to apply the helical wire enclosure of Russell to the shot-peening apparatus of Mead in order to provide a controllable stiffness to the shot supply line.

4. Regarding claim 17, Mead/Russell as described above discloses the claimed invention except for the material choice of polyurethane. It would have been obvious to one of ordinary skill in the art at the time of invention to use polyurethane, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Be it known to the applicant that Irwin (US Patent No. 5,933,903) also teaches the use of an elastomeric material, which is equivalent to polyurethane, in an equivalent structure for the purpose of making the tube flexible.

5. Regarding claim 18 and 19, Russell teaches that the diameter of the wire used is dependent on the flexibility and stiffness of the tube desired in that he discloses two different tubes and wire enclosures with different properties (figures 5 and 6). At the time of invention, it would have been an obvious matter of design choice to a person of ordinary skill in the art, to use different diameters

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of wire with respect to the thicknesses of the tube, because applicant has not disclosed that this provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected applicant's invention to perform equally well with either of the wire enclosures as taught by Russell or the claimed wire diameter because either wire performs the same function of providing the desired stiffness and flexibility characteristics to the elastomeric tube equally well. Therefore, it would have been an obvious matter of design choice to modify Russell to obtain the invention specified in this claim.

6. Regarding claim 20, Russell teaches that the distance between sections of the helically wound wire adjacent one another in a longitudinal direction of the tube is approximately the same or smaller than the diameter of the wire when the tube extends in a straight line (figures 5 and 6).

7. Regarding claim 21, Russell teaches that the manner in which the helically coiled spring wire is coiled about the tube is dependent on the flexibility and stiffness of the tube desired in that he discloses two different tubes and wire enclosures with different properties (figures 5 and 6). At the time of invention, it would have been an obvious matter of design choice to a person of ordinary skill in the art, to use different distances between sections of wire, because applicant has not disclosed that this provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected applicant's invention to perform equally well with either of the wire enclosures as taught by Russell or the claimed wire distances because

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either wire performs the same function of providing the desired stiffness and flexibility characteristics to the elastomeric tube equally well. Therefore, it would have been an obvious matter of design choice to modify Russell to obtain the invention specified in this claim.

8. Regarding claim 22, Russell teaches that the wire enclosure is made of spring wire (114, col. 9, lines 8-27).

9. Regarding claim 23, Russell teaches that the spring wire coil is held between the two ends of the tube so as to maintain the proper stiffness of the tube as can be seen in figure 5.

10. Regarding claim 24 as best understood for the purposes of examination, Mead/Russell is capable of peening the inside of a bent pipe just as well as the channel depending on the diameter of the pipe which is not specified, i.e. if the pipe is big enough for me to stand in I could hold this tool and peen the walls.

***Allowable Subject Matter***

11. Claims 25 and 26 are allowed.

12. The following is an examiner's statement of reasons for allowance:

13. Regarding claim 25, while the combination of Mead and Russell is held to be inherently capable of performing the functions of the apparatus of claims 16-24 they do not expressly teach the method step of advancing the tube through the bent portion of a channel i.e. Mead/Russell is advance-able as in claim 16 but is not taught to be advanced as in claim 25.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should

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preferably accompany the issue fee. Such submissions should be clearly labeled

"Comments on Statement of Reasons for Allowance."

***Conclusion***

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Koehler whose telephone number is (571) 272-3560. The examiner can normally be reached on Mon.-Fri. 7:30A-4:00P.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Jimenez can be reached on (571) 272-4530. The

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fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Christopher M. Koehler  
January 25, 2006

CMK